

J. OUTPATIENT CLINICS

1.0 PURPOSE AND SCOPE

This document sets forth space planning criteria for the Outpatient Clinical Services in military health care facilities.

2.0 DEFINITIONS

Outpatient Clinical Services - The concept of Outpatient Clinical Services includes two major elements. The first element provides preventive and curative medical care to ambulatory patients. The second element provides administrative and supportive space required to operate the service.

Clinic - A clinic may be general practice, a specialty, or a grouping of specialties. Specialties may be grouped when there are no medical contraindications and when the work load of each specialty does not warrant a separate clinic. A clinic will normally include the following areas: waiting, reception, offices, examination rooms, special purpose rooms, utility rooms, treatment rooms, storage space, linen rooms, conference rooms, lounges, and toilets.

Emergency Clinic - An Emergency Clinic provides outpatient diagnosis and treatment of conditions requiring the immediate attention of a physician during any part of a 24-hour day or treatment of a patient who describes a minor illness as an emergency. Emergency rooms can be level I, II, or III.

Clinic Visit - A visit is a contact between an eligible beneficiary and a medical care provider. A visit consists of either examination, diagnosis, treatment, evaluation, consultation, counseling, or medical advice in a clinic, or treatment/observation in quarters.

Projected Work load Refer to DoD Instruction 6015.17, Paragraph v.C.3.

3.0 POLICIES

A minimum patient load of 150 -200 inpatients per year and 1500-2000 outpatients per year with a diagnosis of malignancy is required to justify a separate Oncology Clinic.

Adolescent - A separate adolescent clinic will be programmed when justified by work load. (2 Adolescent Medicine providers and/or 15,000 adolescent medicine annual visits).

Well Baby - A separate well baby clinic will be programmed when justified by work load. (2 providers and/or 10% of total annual pediatric visits)

The Emergency Clinic is programmed by individual study based on requirements to handle a high number of true emergency cases. This Clinic is not considered to be general walk in clinic. The Emergency Clinic should be located adjacent to the ancillary support services.

Emergency Area is required when the work load and staffing do not warrant an Emergency Clinic.

Family Practice - Functions required where Family Practice is a department (separate from the Primary Care Clinics).
Family Practice - Functions required in the Family Practice Clinic when certain Medical/Specialty Clinics are not programmed.

Family Practice - Functions required where Family Practice is a service within the Primary Care Clinics.

Physical Examination - A separate Physical Examination Clinic is normally provided when work load exceeds an average of 100-150 examinations per week (20 per day). Do not include Family Practice Physical exams when determining whether to establish a separate Physical Examination Clinic. (In computing workstations, any fraction of 0.4 or over may be converted to the next highest number. A minimum of one each is required unless otherwise indicated.)

Clinic Composition

Whenever the work load of any specialty does not support a separate clinic, two more specialties may be combined using the following or other compatible groupings.

Medical Specialty

Allergy/Immunization
 Cardiology
 Dermatology
 Endocrine and Metabolic
 Gastroenterology
 Hematology/Oncology
 Infectious Disease
 Internal Medicine
 Nephrology
 Neurology
 Nutrition
 Pulmonary
 Rheumatology
 Family Practice

Psychiatric Clinics

Mental Health/Hygiene
 Psychiatry
 Child Psychiatry
 Clinical Psychology

Eye, Ear, Nose & Throat

Ophthalmology/Optomety
 Otorhinolaryngology
 Audiology
 Speech Therapy

Military/Environmental Clinics

Community Health Nursing
 Preventive Medicine
 Aerospace, Aviation, and Submarine Medicine
 Occupational Health/Civilian Employee Health Clinic
 Industrial Hygiene, Environmental and Bioenvironmental Sciences

Other Clinics**Physical Medicine**

The OB/GYN Clinic will not be combined with any other clinic due to medical contraindication.

The Emergency Area should be adjacent to the General Outpatient Clinic, the Primary Care Clinic, or the Family Practice Clinic (according to the specific Military Medical Department).

Obstetrics and Gynecology

OB/GYN
 Family Planning

Pediatrics

Adolescent
 Infectious Disease Pediatrics
 Well Baby

Primary Care

Emergency
 Family Practice
 General Practice
 Physical Examination

Surgical Specialty

General Surgery
 Neurosurgery
 Orthopedic/Podiatry
 Plastic Surgery
 Thoracic - Vascular
 Urology
 Colorectal

Clinic Size

Programming a separate specialty clinic is not considered practical when less than two physicians are required.

To facilitate clinic management and accommodation of patients, a clinic normally should not exceed 12 to 15 physicians. Patient and staff toilet facilities for outpatient clinics.

* The number of fixtures to be provided for these functions will be based on the total number of visitors and patients during the peak period as indicated by the number of seats provided in waiting rooms. The following table will be used to determine the number of fixtures.

	Water Closets	Urinals	Lavatories
Each 15 women or fraction thereof	1		1
Each 20 men or fraction thereof	1		1
Each 40 men or fraction thereof		1	

* Space for the toilet fixture requirements calculated above will be provided as follows:

	Planning Range
Patient & Visitor toilets containing no more than one fixture of the same kind	30 NSF per fixture
Toilet rooms containing two 30 NSF per fixture or more fixtures of the same kind will have at least one handicapped fixture	30 NSF per fixture
Patient toilets within clinics (ie., specimen)	30 NSF per fixture
Staff toilet room fixtures	30 NSF/fixture
Single occ toilet	50 NSF each
Diaper change area	10 NSF

Locker Rooms: In general, locker room space will be consolidated into a central locker room facility with appropriate toilet and shower facilities. Individual clinics will be provided with locker rooms only where the staff is required to change into alternative clothing for purposes of asepsis, infection control, or patient safety. The number of fixtures for the toilet shower facilities will be calculated based upon the planned number of employees on duty during the daytime shift minus personnel employed in the surgical suite, the obstetrical suite, food service, and employees on the nursing units. Lavatories and toilets will be provided according to the ratios identified above. Showers will be provided on a ratio of 1 shower per 20 using employees, not to exceed 10 shower fixtures.

Lounges: A staff lounge is permitted per clinic by the criteria. Where a staff lounge will serve less than 10 employees per shift, every effort will be made to combine the lounges from two or more adjacent clinics. The staff lounge criteria includes a 10 NSF allowance for "Box Lockers" to permit employees that do not have an assigned office to secure their personal belongings (purses, hats, and so forth).

4.0 PROGRAM DATA REQUIRED

Projected clinic visits per year.

Distribution of clinic visits by clinic or service and beneficiary category.

Number of providers programmed.

Distribution of practitioners by specialty and/or service.

Distribution of technicians by specialty or service

Distribution of nurse practitioners by specialty or service

Projected number of immunizations per year.

Projected ECG tests per year.

Projected EEG tests per year.

Projected number of chemotherapy doses per year

Projected number of physical examinations per year.

Basis of projections.

Data used for individual studies of specific functions.

Projected records = (eligible beneficiaries) x (1 + carry over)

5.0 SPACE CRITERIA

Clinic Space Requirements:

The following lists indicate functions that are normally required, the basis for planning and the planning range for clinics in DoD Hospitals. Functions which are not listed and those which show "Individual Study" require a study to determine the need and space requirement based on the tasks to be performed and equipment to be accommodated. It is intended that planners include all functional areas listed herein, unless there is a valid requirement at the installation under consideration.

Modification of the space criteria may be necessary to meet specific mission requirements but any such modification will require OASD(HA) approval. Special requirements for spaces not covered by this document will be developed on an individual basis and will require OASD(HA) approval.

Physician's Offices - Each physician, Physician's assistant, clinical nurse practitioner, and allied scientist on the staff will be provided a private office based on the following criteria: (excluded offices are provided under other criteria, such as Radiologists, Pathologists, Anesthesiologists, Commanders, etc.).

Chiefs of major departments in teaching hospitals	150 NSF
Conference Room	280 NSF
Chiefs of specialty services in teaching hospitals/Dental activities	140 NSF
Chiefs of major services in other hospitals/Dental activities	140 NSF
All other physician's, physician's assistants and clinical nurse practitioners who do not require a combination office-exam room	100 NSF/office
Allied scientists who require a combination office-exam room	140 NSF office/exam

Conference Area - Provided in each clinic for group teaching 200-250 NSF as required.

The following are the space planning criteria for DoD Outpatient Clinical Services, organized in alphabetical order.

FUNCTION	NSF AUTHORIZED	PLANNING RANGE/COMMENTS
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Department Administration

Administrative Offices - The office space required to provide administrative support to operate the clinic services will be provided in accordance with criteria for administration (Page A-5) and the following specific areas

Central Clinic Lobby	150	minimum of 16 NSF per seat. Maximum 500 NSF Seats = $\frac{\text{avg clinic visit per day} \times 0.2}{7 \text{ hours per day}}$
ADP terminal	20	per terminal device
Visitor Toilets		
Male (wc, lav)	60	30 NSF per fixture per 20 seats
Urinal	30	30 NSF per fixture per 40 seats or fraction thereof.
Female	60	30 NSF per fixture per 15 seats.
Outpatient Records	**	(1) Lineal Feet (LF) shelf space = <u>Projected Records</u> / 16 records per LF (2) NSF = LF x shelf factor(*) (*) w/6 shelves = 0.42. (*) w/5 shelves = 0.504
Outpatient Records Clerk	80	minimum. 80 NSF per station, 1 for each clerk programmed
Central Appointment	80	per clerk Weekly scheduled visits = $\frac{\text{annual scheduled visits}}{50 \text{ (wks per yr)}}$ Clerks required = $\frac{\text{Weekly sched. visits} \times (1.2)}{700 \text{ (apt per clerk-wk)}}$ note: 1.2 is multiplier to account for multiple calls per appointment, i.e. cancellations.
Appointment Clerk Lounge	110	May be provided with 3 or more clerks. Add 10 NSF per clerk greater than 10. Maximum 150 NSF
Addressograph Machine	60	per machine. add 20 when ADP equipment is programmed
<u>Functions Common to all Clinics (exceptions noted)</u>		
Reception	100	minimum; 1 per clinic
ADP terminal	20	per terminal device
Waiting	16	per space; 25 per handicapped seat 2.6 spaces per exam or treatment room, unless otherwise noted. Recommend 5% of total space dedicated to handicapped seating.
Public Toilets:		
Male (wc, lav,ur)	90	30 NSF per fixture per 20 seats.
Urinal	30.	per 40 seats or fraction thereof.
Female (wc, lav)	60	30 NSF per fixture (lav, wc) per 15 seats.
Litter/Wheelchair storage	60	1 per clinic
Nurse's Office	100	1 per head nurse programmed

NCOIC Office	100	per clinic
Nurse's Station	100	1 per clinic when 2 or more treatment/procedure rooms are programmed
Clean Utility Room	150	1 per clinic
Equipment Storage	100	Individual justification. Not required in all clinics.
Soiled Utility/	80	80 1 per clinic
Trash Room	50	
Janitor's Closet	40	1 per 10,000 NSF
Staff Toilets:		
Male (wc, lav)	60	30 NSF per fixture per 20 men
Urinal	30	One per 40 men or fraction thereof
Female (wc, lav)	60	30 NSF per fixture per 15 women
Staff Lounge	100.	minimum; add 10 NSF per staff member greater than 10. 200 NSF maximum. One per clinic. If less than 10 staff members per shift, consider combining with another clinic.
Conference Room	200	Individual Study. 1 per service with teaching or training program. For small svcs., function could be met by adding 40 NSF to lounge.
Staff Lockers:		
Male	100	minimum; add 6.5 NSF per locker for each FTE greater than 10. Consolidate locker space as defined in section 3.0
Female	100	minimum; add 6.5 NSF per locker for each FTE greater than 10. Consolidate locker space as defined in section 3.0.
Doctor's Office	100	1 per doctor programmed
Exam Room	100	2 per doctor programmed
Procedure Room	150	1 per clinic if justified
<u>Medical Specialty Clinics</u>		
<u>Allergy/Immunization</u>		
Allergen Injection Room	140	1 per Allergy Clinic
Skin Testing Room	60	per station, min 2 stations number of stations = $\frac{\text{visits per wk} \times \text{test per visit}}{3 \text{ test per hr} \times 20 \text{ hr per wk}}$
Holding Area	100	1 per Allergy Clinic
Allergen Preparation Laboratory	120	minimum; 60 NSF per space1 space per 2 skin testing stations. 1 Lab per clinic
Immunization	200	minimum; 140 NSF per station number of stations = $\frac{\text{injections per week}}{20 \text{ inj per hr} \times 35 \text{ hr per wk}}$
Immunization Holding Area	100	1 per immunization room
Immunization Waiting Area	16	per space; 12 spaces per injection station

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Cardiology

Electrocardiogram Testing Area	100	per station, Stations = <u>ECG tests/week</u> / 3 tests per hr x 35 hr per wk
ECG Work Area and Records	80	per work area plus 10 NSF per station. 1 per clinic
Vectorcardiography Room/Signal Averaged ECG	100	1 per Cardiology Clinic
Dressing Cubicle	40	per cubicle; 1 per ECG, 1 per Vectorcardiography, 1 per Phonocardio Room, 1 per Echocardiography
Phonocardio & Echo cardiography Room	140	Individual Study
Treadmill/Stress Test Room w/Shower	200	1 per Cardiology clinic when cardiologist is programmed. Add 50 NSF if 'Master-2-Step' stairs are required.
Holter Monitor Room	100	1 per Cardiology clinic when cardiologist is programmed
Cardiac Cath. Lab		1 per Card. Cl. where authorized
Exposure Room	530	single plane only
Biplane Ex. Room	700.	Special justification required.
Control Room	100	1 per exposure room
Dark Room w/ repl tank space	120	1 per 1-2 exposure rooms(if cine film processing)?
Computer Room	80	1 per 1-2 exposure rooms
Cine Film Viewing	100	per exposure room, 1 room
Cine Film Storage	100	per exposure room, 1 room
Prep Room	100	1 per 1-2 exposure rooms
Scrub Room	60	1 per 1-2 exposure rooms
Soiled Utility Rm	80	1 per exposure room
Instrument Room	100	1 per 1-2 exposure rooms

Dermatology

Derm./Procedure Treatment Room	150	1 per service, add a 2nd room when 3 or more physicians are programmed for Dermatology
Dermatology Lab	60	1 per clinic. Additional rooms justified based on 1 per 5 providers.
Ultraviolet Booth	40.	1 per clinic. Additional rooms justified based on 1 per 5 providers.
MOHS Treatment/Lab	**	Individual study. Includes treatment spaces, sub-waiting & lab.
Dermatology Exam	100	2 per provider
Grenz Ray Room	80	1 per clinic
Dressing Cubicle	40	
Linen Storage	20	

Endocrine and Metabolic

Doctor's Office	100	1 per doctor programmed
Exam Room	100	2 per doctor programmed
Procedure Room	150	1 per clinic if justified
<u>Gastroenterology</u>		
Fluoroscopic Room (Upright machine)	270	Individual Study
Treatment Room	150	1 per clinic
Proctoscopic Room	150	1 per clinic
Dressing Cubicle	60	minimum; 40 NSF per cubicle. 2 per proctoscopic room
Patient Toilet	50	1 per proctoscopic room wc/lav
Endoscopy Room	150	Individual Study
Patient Toilet (WC/Lav)	50	1 per endo Room (WC/Lav)
Recovery Room	120	1 per clinic
Patient Toilet	50	1 per recovery room
Esophageal Motility Room w/Toilet	140	1 per clinic
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<u>Hematology/Oncology</u>		
Pharmacist Officer office	.	per individual study.
Tumor Board Registry		per individual study.
Nurse Specialist's Office	100	1 per nurse specialist programmed
Chemotherapy		Individual Study 1 per clinic
Treatment Room	300.	2,500 to 10,000 annual doses. Allowance provides for 3 patient chairs and support space.
Holding Area	300	Greater than 10,000 doses
Recovery Room	120	1 per clinic
Patient Toilet	50	1 per recovery room
Special Purpose Room		Individual Study
Social Worker's Office/Exam Room	140	1 per social worker programmed in Medical Clinic
Social Work Specialist's Office	100	1 per technician programmed
<u>Infectious Disease</u>		
Providers Office	100	1 per provider
Exam Room	100	2 per provider
<u>Internal Medicine</u>		
Nurse Practitioner's Office	100	1 per nurse practitioner programmed
Exam Room	100	2 per nurse practitioner
<u>Nephrology</u>		
Renal Studies	100	1 per clinic when a renal specialist is programmed
<u>Neurology</u>		
EEG Testing Area	100	per station Stations =

EEG Work Area	130	<u>tests/wk</u> / 0.5 tst per hr x 30 hr per wk plus 10 NSF per EEG test station greater than one. 1 per clinic
<u>Nutrition</u>		
Dietitian's Office	100	1 per full-time dietitian programmed
Height/Weight Screening	100	
<u>Pulmonary (Supports both inpatient and outpatient)</u>		
Chief Therapist Office	100	1 per clinic
	Office	Office
Equipment Prep. Cleaning Area	150	minimum; plus 10 NSF per Tx. cubicle. 200 max. 1 per clinic
Equip. Storage & Maintenance Area	150	minimum; plus 10 NSF per Tx. cubicle. 1 per clinic
Gas Cylinder Storage	30	1 per clinic
Ventilator Storage	10	per ventilator
Inhalation Cubicles	150	minimum; cubicles = <u>treatments per week</u> / 4 treatments per hr x 35 hr per wk
	80	per tilt table
	70	per chair
		1 tilt table per two chairs
Pulmonary Function Lab: If Pulmonary Service is programmed		
Administration Space	100	1 per lab
Screening	50	1 per lab
Flow Volume Loop	50	1 per lab
Automated Pulmonary Function	100	1 per lab
Body Box	100	1 per lab
Blood Gas Analysis	25	1 per machine
Treadmill Room	250	Individual Study
Sleep Studies Room	100	Individual Study
Anteroom (for equipment)	50	Individual Study
Respiratory Treatment equipment storage	25	per cubicle 1 per respiratory treatment area
Home Care Coordinator Office	100	1 per respiratory treatment
Endoscopy/ Bronchoscopy Suite	150	Individual Study
Recovery Room	120	1 per clinic
Patient Toilet	50	1 per recovery room WC/LAV
Spirometry studies	50	
<u>Rheumatology</u>		
Providers Office	100	1 per provider
Exam Room	100	2 per provider
<u>Obstetrics and Gynecology</u>		
<u>OB/GYN</u>		

Weights and Measures	200	1 per clinic
Treatment Room	150	1 per clinic
Consultation Room	100	Individual Study
Specimen Lab	100	Individual Study
Specimen Toilets	50	minimum;
Nurse Practitioner's/ Physician's Asst Office	100	1 per nurse practitioner/PA programmed
Exam Room	100	2 per nurse practitioner/PA programmed
Ultrasound/NST	150	
Literature/Forms Storage & Audio/ Visual Aids	200	1 per clinic
Conference Room 200 1 per clinic	Conference Room 200 1 per clinic	Conference Room 200 1 per clinic

Pediatric Clinics

Adolescent - A separate adolescent clinic will be programmed when justified by work load. (2 adolescent medicine providers and/or 15,000 adolescent medicine annual visits)

Doctor's Office	100	1 per doctor programmed
Exam Room	100	2 per doctor programmed

Pediatrics

Waiting/Play Area	16	per space. 25 NSF per handicapped space. 4.3 spaces per exam or treatment room. 5% of total spaces dedicated to handicapped
Toy Storage	100	1 per clinic
Patient Toilet		
Male WC/LAV	70	30 NSF per fixture and 10 NSF for counter w/sink for diaper change.
Female	70	30 NSF per fixture and 10 NSF for counter w/sink for diaper change.

Isolation Suite

Isolation Waiting	100	1 per clinic
Isolation Toilet WC/LAV	70	10 NSF for counter w/sink for diaper change. 1 per clinic.
Isolation Exam Room	100	1 per clinic
Treatment Room	150	1 per 8 doctors
Nurse Pract. Office	100	1 per nurse practitioner programmed
Exam room	100	2 per practitioner programmed
Weights and Measures Room	200	1 per clinic
Vision & Hearing/ Screening Room	100	1 per clinic
Psychological Testing	100	Individual Study
Immunization Area	200	minimum. If immunizations are administered, see the immunization criteria. 140 NSF per station
Holding area	100	per clinic
Waiting area	16	per space; 12 spaces per station

Social Worker's Office	140	1 per social worker programmed
Gross motor skills exam/testing room	150	Supports designated developmental pediatrics mission
<u>Well Baby</u> - A separate well baby clinic will be programmed when justified by work load. (2 providers and/or 10% of total annual pediatric visits)		
Subcontrol	100	1 per clinic
Waiting	16	per space. 25 NSF per handicapped. Based on Well Baby study visits, 5% of total area dedicated to handicapped
Feeding Room	100	Individual Study
Toilet WC/LAV	70	30 NSF per fixture and 10 NSF for counter for diaper change.
Immunization area	.	If immunizations are administered, see the immunization criteria.

Primary Care Clinics**Emergency**

The Emergency Clinic is programmed by individual study based on requirements to handle a high number of true emergency cases. This clinic is not considered to be a general walk-in clinic. The Emergency Clinic should be located adjacent to the ancillary support services.

Head Nursing	100	
Waiting	16	per space; 25 per handicapped spaces; 3.9 spaces per exam. 5% of total space dedicated to handicapped seating.
Pt. Toilet (wc,lav)	50	1 per clinic
Tap/Decon/sponge	100	1 per ER clinic for infants
Family consultation and waiting area	120	1 per clinic
Equipment storage	250	1 per clinic
Isolation room	140	1 per clinic

Emergency Area **required when the workload and staffing do not warrant an Emergency clinic**

Triage area	60	per cubicle. 1 cubicle per 10,000 yearly visits
Family Waiting and consultation Rm	120	1 per Emergency Area
Ambulance Dispatch	100	minimum plus 10 NSF per driver on duty per shift. 1 per hospital
Emergency Room	300	per room. Individual study
Treatment cubicle	120	per cubicle. Individual study
OB/GYN Exam Room	100	1 per clinic
MOD Room	100	1 per hospital
AOD Room	100	1 per hospital
Toilet - shower	70	1 per 2 AOD or MOD bedrooms. Single occupancy
Equipment Storage	100	1 per clinic

Family Practice

Functions required where Family Practice is a department (separate from the Primary Care clinics).

Dietitian's Office	100	1 per dietitian programmed 1 per clinic
Nurse Practitioner's Office	100	1 per nurse practitioner
Exam Room	100	2 per nurse practitioner
Holding Area	120	1 per immunization room
Patient toilet	60	
Diaper change	10	
Family Therapy room	140	1 per clinic
Physician's assistant's office	100	1 per PA programmed
Exam Room	100	2 per PA programmed
Patient Learning Library	200	1 per clinic

Functions required in the Family Practice Clinic when certain Medical/Specialty Clinics are not programmed

Proctoscopic room	150	1 per clinic if medical or surgical specialty clinic not programmed
Toilet	50	1 per proctoscopic room
ECG room	100	1 per clinic if medical specialty clinic not programmed
Dressing Cubicle	40	1 per ECG Room
Audiobooth Room (screening)	110	1 man double wall booth
	210	4 man double wall booth
	260	6 man double wall booth
Optometric Eye lane	140	1 per clinic if Optometry Specialty Clinic not programmed
ENT Exam Area	100	1 per clinic if ENT specialty not programmed
Appliance Modify Prep and Cast room	140	1 per clinic if Orthopedic Specialty clinic not programmed

Functions required where Family Practice is a service within the Primary Care Clinics

Nurse	100	1 nurse per practitioner programmed
Exam room	100	2 per nurse practitioner
Treatment Room	120	1 per clinic

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General Practice

Exam Room	100	2 per nurse practitioner and/or 2 per physician extender programmed
Treatment Room	150	1 per clinic
TPR Room	100	1 per clinic
Nurses station	100	1 per clinic
Nurse Practitioner's Office	100	1 per nurse practitioner programmed

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Physical Examination

A separate Physical Examination Clinic is normally provided when work load exceeds an average of 100-150 examinations per week (20 per day). Do not include Family Practice physical exams when determining whether to establish a separate Physical Examination Clinic. In computing workstations, any fraction of 0.4 or over may be converted to the next highest number. A minimum of one each is required unless otherwise indicated.

Waiting & Form writing	16	per space. Number of spaces = phys exams per day / 2 (groups per day)
History Station	50	per station, 1 station per 40 exams per day
Height & Weight	50	50 per station, 1 station per 100 exams per day
Blood Pressure and Pulse Station	50	per station, 1 station per 100 exams per day
ECG Station	90	per station, 1 station per 80 exams per day
Specimen Toilet (wc, lav)	50	single occupancy
Urine Spec. Coll.	70	1 per clinic
Vision Testing (Screening only)	70	per station, 1 station per 60 exams per day
Optometric Eye Lane	140	1 per clinic if Optometric Clinic not programmed & no eyelane provided in Family Practice Clinic
Audiobooth	110	1 man double wall booth
	210	4 man double wall booth
	260	6 man double wall booth
Dental Check	90	per station, 1 if number of physical exams per day exceeds 100 per day.
X-Ray Station	180	if number of physical exams per day exceeds 150 per day
Darkroom	90	1 per clinic when X-ray station is programmed.
ENT Exam Station	100	1 per clinic if ENT Specialty Clinic not programmed
Wait Between Stations & Int. Cir.	20	min; 5% of Amt. of space req'd for exam rooms. 1 per clinic.

Physical Examination Clinic with under 20 exams per day.

Waiting & Form Writing (w/alcove)	140	1 per clinic
Reception Desk	100	1 per clinic
Specimen Toilet	50	minimum; single occupancy
ECG w/dress. booth	120	1 per clinic
Weights & Measures	70	1 per clinic
Blood Collection	50	1 per clinic
Waiting between Stations & Int. Circulation	16	per seat. seats = $\frac{\text{avg. clinic visits per day} \times 0.02}{7 \text{ hours per day}}$

Psychiatric Clinics

Mental Health/Hygiene

Psychiatrist's Office/Exam	140	1 per psychiatrist programmed
Psychologist's Office/Exam	140	1 per psychiatrist programmed
Nurse Practitioner Office/Exam	140	1 per nurse practitioner programmed
Social Worker's Office/Exam	140	1 per social worker programmed
Technician's Office (Social Work or Psychology)	100	1 per technician programmed
Group Therapy	200	1 per clinic. (2 per clinic with 3 or more psychiatrists)
Treatment Room	150	Individual study

Psychiatry

Psychiatrist's Office/Exam	140	1 per psychiatrist programmed
Nurse Clinician Office/Exam	140	1 per nurse clinician programmed
Technician's Office (Social Work or Psych)	100	1 per technician programmed
Group Therapy Room	200	1 per clinic (2 per clinic with 3 or more psychiatrists programmed)
Mirror Room	100	
Treatment Room	150	Individual Study

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Child Psychiatry

Play Observation	120	1 per clinic with child psychiatry program. Additional rooms may be programmed by individual study
Doctor's Office/Exam	140	1 per doctor programmed

Clinical Psychology

Psychologist's Office/Exam	140	1 per psychologist programmed
Psychological Testing	100	Individual Study

Social Work

Social Worker's Office	140	1 per social worker programmed
Technician's Office (Social Work or Psychology)	100	1 per technician programmed
Group Therapy Room	200	1 per clinic (2 per clinic with 3 or more psychiatrists programmed)

Surgical Clinics**General Surgery**

Treatment Room	150	1 per 6 exam rooms
Recovery Room	120	per space, 1 space per 2 surgical treatment rooms
Patient Toilet	50	1 per recovery room
Nurse Practitioner Office	100	1 per clinic when nurse practitioner Office programmed
Exam Room	100	2 per nurse practitioner
Endoscopy Room	150	Individual Study
Patient Toilet	50	1 per endoscopy room
Proctoscopic Room	150	1 per 4 providers. 5 or more providers require special study.
Dressing Cubicle	40	per cubicle, 2 per procto room
Patient Toilet	50	1 per procto room

Neurosurgery

Doctor's Office	100	1 per doctor programmed
Exam Room	100	2 per doctor programmed

Orthopedic/Podiatry

Podiatrist's Office	100	1 per podiatrist programmed.
Exam Room	100.	2 per podiatrist programmed.
Treatment Room	150	Individual Study

Appliance Adjustment & Modification Shop	140	1 man shop
	440	2 man shop
Appliance Manufacturing Shop (Brace Shop)	1000	Individual Study
Gait Observation Lane	135	1 per clinic
		per table, Number of tables =
Cast Room	100	
		$\frac{.4 \times \text{ortho visits/wk}}{1 \text{ visit per hr} \times 35 \text{ hr per wk}}$
Plaster Prep & Storage	50	plus 10 NSF per table; 1 per Orthopedic Service
Splint & Crutch Storage	50	plus 10 NSF per table; 1 per Orthopedic Service
Appliance Fitting Room	80	per room, 1 per 3 orthopedic surgeons programmed
General Radiographic Room	270	Individual Study
Film Processing	90	1 if general radiographic service is provided

Plastic Surgery

Treatment Room	150	1 per 6 exams
Recovery Room	120	per space, 1 space per 2 surgical treatment rooms
Patient Toilet (wc, lav)	50	1 per recovery room

Thoracic - Vascular

Microvascular Lab		Special Study
Treadmill Room	200	Individual Study
Dressing Cubicle	40	1 per treadmill room
Patient Shower	30	1 per treadmill room

Urology

Cystoscopy Rooms	*	cystoscopic rooms = $\frac{(\text{annual urology visits}/52) \times 0.5}{0.6 \text{ proc per hr per room} \times 30 \text{ hr per wk}}$
Cysto w/Fluoro	300	1 per clinic if TURs performed
Cysto - Rad	300	Number from formula minus number of cystoscopy rooms with fluoroscopic capability. Includes x-ray control booth.
Control Booth	100	
X-Ray Reading Room	100	
Scrub Area	60	60 per cysto room
Urology Darkroom and Workroom	90	1 per urology service when 2 or more cysto rooms are provided
Dressing Cubicle	40	per cubicle, 2 per cysto room
Patient Toilet	50	1 per cysto room
Urology Treatment Room	150	Individual Study, maximum 1 per clinic
Recovery room	120	per space
Recovery Toilet	50	
Urodynamics Room	100	

Dressing Cubicle	40	per cubicle, 2 per treatment room
Toilet	50	1 per IVP room
Urology Lab	80	If 4 or less exam rooms. Add 40 NSF if more than 4 exam rooms. 120 NSF maximum. 1 lab per clinic
Patient Toilet (wc, lav)	50	1 per urology exam room

Updated 18 Feb 92

**Military/Environmental
Clinics**

Community Health Nursing

Health Nurse's Office	100	1 per health nurse programmed
Exam Room	100	1 per health nurse programmed
Patient Toilet (wc, lav)	50	2 per activity
Waiting	16	10 spaces minimum
Storage	100	multiplier for larger clinics
Secretary/Clerk	100	per person programmed
Communicable Disease Interviewing Room	100	1 per activity

Preventive Medicine

Preventive Medicine Chief's Office	140	1 per Chief, Preventive Medicine activity programmed
Environmental Engineer's Office	100	1 per environmental engineer programmed
Environmental Sanitarian's Office	100	1 per environmental sanitarian programmed
Medical Entomologist Office	100	1 per medical entomologist
Nuclear Medical Science Officer's Office	100	1 per nuclear science officer programmed
Health Physics Technician office	100	1 per technician
Health Assistant Office	100	1 per clinical specialist programmed
PVT MED Specialist's Office	100	1 per technician programmed
Literature/Forms Storage	80	1 per activity. Share with Health Nurse.
Secretary/Clerk	120	1 per section
Safety Officer/NCO	100	1 per safety officer/NCO programmed
Industrial Hygienist Office	100	1 per industrial hygienist programmed
Industrial Hygiene Lab	100	1 per activity
Water Lab	100	1 per activity
Nuclear Medical Science Lab	150	When nuclear medicine science office authorized. w/Shield for Walls/Doors/Ceilings/Floor as appropriate

Aerospace, Aviation, and Submarine Medicine

Treatment Room	150	1 per clinic
Optometrist's Eye Exam Room and Office	160	1 per optometrist programmed

Occupational Health/Civilian Employee Health Clinic

Audiobooth	110	1 man double wall booth
	210	4 man double wall booth
	260	6 man double wall booth
Screening Eye Testing	100	1 per clinic
Secure Area for Health Record Storage	*	Individual Study, 1 per clinic
Clerk/Secretary Office	120	minimum or 80 NSF per FTE assigned
Interviewing & Counseling Room	100	1 per 2 nurses assigned

Updated 13 Apr 94

Industrial Hygiene, Environmental and Bioenvironmental Sciences

Preventive Medicine Office	100	1 per PMO programmed
Health Nurse	100	1 per health nurse programmed
Environmental Engineer	100	1 per environmental engineer programmed
Environmental Sanitarian	100	1 per environmental sanitarian programmed
Medical Entomologist	100	1 per medical entomologist programmed
Nuclear Medical Science Officer	100	1 per nuclear medical science officer programmed
NCOIC	100	1 per clinic
Health Assistant	100	per clinical specialist programmed
PVTMED Specialist	100	1 per technician programmed

Eye, Ear, Nose, and Throat Clinics Eye, Ear, Nose, and Throat Clinics**Ophthalmology/Optometry**

Optometrist Eye Exam Room/Office	195	per room, 2 exam/office room per optometrist up to 3 optometrists. Then 1 exam office per optometrist. Design space according to administrative needs. One exam office may be located in Aeromedical..
Ophthalmologist Office	100	1 per ophthalmologist programmed
Ophthalmologist Exam Room	140	per room, 2 exam rooms per ophthalmologist
Screening Eye Testing	100	per station, Number of stations= <u>Eye Clinic visits per week</u> /6 visits per hr X 35 hrs per wk
Eye Treatment Room	150.	per ophthalmology service
Laser Treatment Room	150	per ophthalmology service
Fundus Camera Room	150	For two cameras
Electroretinography		

Room	*	Individual Study
Fitting / Dispensing	120	minimum; 1 per Eye Clinic
	150	staff of 3 to 5
	200	staff over 5
Equipment Storage	100	1 per clinic
Visual Field / Perimetry	100	1 per Eye Clinic, includes Humphries and manual testing
Contact Lens	120	Per Department
Low Vision Training Aids	100	Per Department
Photo Processing	75	as required to Support Fundus Camera
(Ultrasound)	140	per Ophthalmology Service, size adequate for A-scan, B-scan, and pachymetry units
Seated Recovery	60	per seat. Locate with Ambulatory surgery
Chief Optical Fab	100	This section only if Optical Fabrication Function
Optical Fab Admin	80	per optical fab admin staff, min 100
Optical Fab stations	100	Per optical fabricators
Optical Fab Parts Storage	100	Optical Fab storage area

Otorhinolaryngology

Doctor's Office	100	1 per doctor assigned
ENT Exam Room	100	per room, 2 per ENT physician
ENT Treatment Room	150	per room, 1 per 6 ENT exam rooms
Recovery Room	120	per room, 1 per ENT Clinic
Toilet	50	1 per recovery room
Vestibular Exam Room	150	per room, 1 per clinic
BAER Room	*	Only at facilities w/ENT teaching mission. Special study.
Bone Dissection	*	Only at facilities w/ENT teaching mission. Special study.

Updated 28 May 93

Audiology

Audiologist's Office/Exam	120	per room, 1 per audiologist programmed
Audiobooth Room (Screening)	110	1 man double wall booth
	210	4 man double wall booth
	260	6 man double wall booth
Audiobooth Suite	190	per suite when audiologist is programmed. (two room suite)
Hearing Aid	200	1 per clinic when audiologist is programmed.
Fitting/Classroom	omitted from new criteria	
Hearing Aid Laboratory	100	1 per clinic when audiologist is programmed
Auditory Electrophysiological Laboratory	100	1 per clinic when audiologist is programmed

Speech Therapy

Speech Therapist Office/Exam Room	120	per room, 1 per therapists programmed
Speech Therapy Classroom	150	minimum; 18 NSF per patient per class. Individual Study
<u>Other Clinics</u>		
<u>Physical Medicine</u>		
Electromyography (EMG) Room	100	
EMG Work Area	80	per area, plus 10 NSF per clinic for each add'l EMG station
Dressing Cubicle	40	per EMG room

C. DENTAL CLINICS

1.0 PURPOSE AND SCOPE

This section sets forth space planning criteria for the dental functions at military installations including independent dental facilities and those which are part of another medical facility.

The criteria have been developed on the basis that dentistry will continue to be dynamic and progressive and that the highest quality of care and the most modern facilities are essential to accomplish the cumulative dental work load with available dental manpower.

2.0 DEFINITIONS

Self Preparation Area - An area containing mirror and sink for the proper cleansing of appliances and teeth by patients prior to treatment.

Oral Hygiene Treatment Room (OHTR) - An area similar to a DTR, utilized by an oral hygienist to treat dental patients.

3.0 POLICIES

To the extent possible, dental facilities will be consolidated into the minimum number of facilities consistent with providing dental care effectively to the population served. In the case of dental facilities of five dental treatment rooms (DTRs) or less, when no other medical service facilities are available, they may be combined with other compatible nonmedical facilities.

Dental facilities will be combined with other medical facilities when feasible to provide dental care to the area beneficiaries as a part or all of the installation's dental requirement. Dental facilities may be combined with hospitals for the following reasons: (1) to provide dental care when required as an adjunct to hospital medical care; (2) to support the hospital's oral surgery program.

The dental facility staff required is determined by the process below.

Determine all population categories served. (Population should correspond to verified RAP system data.)

Calculate estimated procedures.

Level of Care (Active Duty). The level of care factor to be utilized under this calculation has been determined to be 24 procedures per active duty member per year. (Baseline raw procedures for active duty beneficiary FY 84.) Multiply level of care factor times active duty population to arrive at the estimated number of active duty procedures required per year.

Level of Care (Retirees, Dependents, and Survivors). Space will not be programmed to provide routine and specialty dental care to retirees, dependents, or survivors. At an approved training site, where space is required for these patients in support of training and in excess of space required for treatment of active duty personnel, the provisions of P.L. 97-337 will be apply.

Active Duty Dependent Care Overseas and in CONUS where appropriate dental care is not available. The level of care factors for dependents of active duty overseas and in CONUS where appropriate dental care is not available, shall be the same as those for active duty. The certification of the absence of appropriate dental care will be made by a DoD area survey.

Sum the total procedures and convert to monthly requirements. (i.e, divide by 12).

Use dentist requirement table to translate procedures to dentist requirements.

<u>Procedures per month</u>	<u>Dentists</u>
0 - 750	1
751 - 1,750	2
1,751 - 3,000	3
3,001 - 4,000	4
4,001 - 4,750	5
4,751 - 5,750	6
5,751 - 6,750	7
6,751 - 7,750	8
7,751 - 8,750	9
8,751 - 9,500	10
9,501 - 10,500	11
10,501 - 11,750	12
11,751 - 12,750	13
12,751 - 13,750	14
13,751+	1 dentist per 1,000 procedures for every additional 1,000 procedures over 13,751.

Each service will determine mix of dental provider team (specialists, general duty dental officers, hygienists, expanded duty dental therapists) needed to meet requirements. Add the number of interns and residents when planning a teaching facility.

Apply the following DTR factors to determine total number of DTRs.

1.5 DTRs	1.5 DTRs per general duty dentist
2.0 DTRs	2.0 DTRs per specialist
1.0 DTR	1.0 DTR per oral hygienist
1.0 DTR	1.0 DTR per dental officer in training
0.5 DTR	0.5 DTR per expanded duty therapist

- When the number of dentists required is calculated to be five (5) dentists or less, use a DTR factor of 2 DTRs per dentist.
- Clinics requiring 6 dentists will program a minimum of 10 DTRs.
- Based on the number of DTRs and total manpower requirements, complete the facility sizing.

The amount of space programmed to support requirements shall be further limited by the anticipated capabilities of the dental staff projected to be assigned or otherwise available to the facility.

Space programmed above projected requirements must be justified by independent study.

4.0 PROGRAM DATA REQUIRED

Projected staffing of all dental facilities on the installation and the proposed staffing for the dental facility under study.

Number and size of all dental facilities on the installation and the specialty capabilities of each.

5.0 SPACE CRITERIA

The following listing indicates the areas normally found in the dental facility, the basis for planning, and the planning range.

Any deviation from these criteria will be documented and presented to OASD(HA) for approval.

Installation Dental Administrative Complex: Space for the Installation Dental Administrative Complex may be programmed with a dental facility only if personnel are projected to occupy these positions on a full-time basis. When

the installation dental surgeon is also the chief of a dental facility, duplicate offices will not be programmed.

FUNCTION NSF AUTHORIZED PLANNING RANGE/COMMENTS

Dental Administration

See Section 5.0, Administration (Annex A) for Common Administrative Spaces.

Office for Post Dental Surgeon,	180	less than 20 DTRs
	200	20 - 30 DTRs
Base Dental Surgeon or Senior Dental Office	220	over 30 DTRs
Conference Room/ Library	240	10-17 personnel
	280	18-29 personnel
	380	30 or more personnel
Central Issue & Supply	110	minimum, 600 NSF Max: 10 NSF per DTR projected for the installation +10 NSF for precious metals
Dental Repair	160	per Repairman. Includes Repairman and his equipment if programmed
Administrative Support	150	1 per installation to accommodate office machine and admin support. Individual study.
Dental Prosthetics	400	minimum, plus 50 NSF per Laboratory technician over 3. Number of Prosthetic Laboratory technicians.
Ceramic Room	120	If number of Prosthetic Lab (Dust free) technicians is greater than 2.

Administrative Areas

Department/ specialty	100	Department/ 100 per office, 1 per Dental facility specialty specialty
Dental Records		Dental Records NSF = $\frac{\text{Proj Records} \times .65}{70 \text{ Records per LF}}$
		1 per dental facility
Reception area	120	Reception area 120
Waiting Area		Waiting Area
Waiting/ Clothing Alcove	110	Waiting/ 110 Facility w/less than 5 Clothing Alcove DTR & OHTR
Waiting	110	Waiting 110 5 DTRs & OHTRs or over:
Seating Area	16	Seating Area 16 (Add) per seat (1.7 spaces per DTR & OHTR over 4)

Clothing Alcove	0.75	Clothing 0.75 (Add) per DTR & OHTR
Housekeeping Supplies & Equipment	0	Less than 5 DTRs & OHTRs Use space in Cleaning supply
	50	5-11 DTRs & OHTRs
	100	12-20 DTRs & OHTRs
	100	Over 20 DTRs & OHTRs, Add 2 NSF per DTR & OHTR over 20.
Cleaning supply	60	per Floor. 1 per dental facility unless multi-story
Mailbox area		Include .32 NSF per mailbox in administrative area if dental clinic is not supported by a parent facility.
Library/Conference and classroom space		Library/Conference of the dental surgeon or senior dental officer meets the requirements of most non-teaching dental facilities. In separate facilities the following factors will be used to determine the conference/classroom space
(1) Speaker's audiovisual equipment	120	
(2) Space for seats	8	per conferee-trainee. Add to above NSF
Night Duty Rooms 1 per dental facility		1 per dental facility
(1) Duty Technician	100	Remaining in the facility overnight in addition to or in lieu of CQ.
Toilet/shower	70	30 NSF per wc and lav plus 10 NSF for shower.
(2) Dental Officer of the Day (DOD)	100	Remaining in the facility overnight in addition to CQ.
Toilet/showers	70	30 NSF per wc and lav plus 10 NSF for shower.
Lounge	100	minimum, maximum 200 NSF. Add 10 NSF per person authorized over 10.
Patient Toilets:	Patient Toilets:	Patient Toilets:
Male (wc, lav)	60	NSF per fixture. 2 (wc, lav) per 20 seats.
urinal	30	One per 40 men or fraction thereof.
Female (wc, lav)	60	30 NSF per fixture. 2 (wc, lav) per 15 seats.
Staff Toilets:		Staff Toilets:
Male (wc, lav).	60	minimum. 30 NSF. (lav, wc) per 20 men.
Female (wc, lav)	60	minimum. 30 NSF per fixture (lav, wc) per 15 women.
Staff Lockers		
Male	100	minimum. Add 6.5 NSF per FTE staff greater than 10.
Female	100	minimum. Add 6.5 NSF per FTE staff greater than 10.

Treatment Areas

DTRs/OHTRs	120	per sizing guidance 1.5-per General duty dentist; 2.0-per specialist 1.0-per dental officer in training 0.5- per expanded duty therapist
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Notes: (1) When the number of dentists required is calculated to be five (5) dentists or less, use a DTR factor of two (2) DTRs per dentist.

(2) Clinics requiring six (6) dentists will program a minimum of 10 DTRs.

(3) Teaching DTRs: Add 50 NSF to one (1) DTR per dental clinic as well as an expanded (+50 NSF) DTR in each residency specialty conducting an approved training program.

Consultation Office	100	minimum or 80 NSF per officer if multiple occupancy. 1 per two dentists not authorized other consultation space. Example: Head, Orthodontia Specialty receives one consultation office. Other Orthodontists receive one consultation office per every two doctors.
X-Ray Exposure	0	1-2 DTRs & OHTRs. Locate unit in DTR
	110	3-13 DTRs & OHTRs plus 36 NSF if panoramic unit is programmed. Provide 1 exposure room and not less than 1 per floor in a multistory facility Plus 36 NSF if tomography capability is planned. Special study required if tomograph is included.
	110	More than 13 DTRs & OHTRs plus 36 NSF if panoramic unit is programmed. Plus 36 NSF if tomo is required (special justification) Provide 1 additional exposure room per 13 DTRs & OHTRs and not less than 1 per floor in a multistory facility
X-Ray Developing.	60	plus 15 NSF if automatic processor is programmed and 10 NSF for Panographic duplicator, if required by mission. 1 per exposure room or add 15-18 NSF per exposure room in excess of 2 served by developing room.
Limited Dental Prosthetics Laboratory	220	1 per dental facility including a second sink for decontamination.
Recovery Room	110	1 per dental facility.
RR Toilet	50	1 per recovery room
Casting/Grinding Room	120	plus 50 NSF for each additional workstation in Area Dental Laboratories. Workstations will be determined by special study.
Preventive Dentistry	150	Maximum 1 per dental facility to accommodate necessary audio-visual equipment and phase contrast microscope.
DTR Support Area	90	1 per 4 DTRs

Dental Support Spaces

Linen	80	Linen 80 1 per dental facility
Supplies		Provided only in dental facilities separate from the installation dental administration complex.)
	80	4 DTRs & OHTRs
	110	5-19 DTRs & OHTRs
	150	20 + DTRs & OHTRs
Central Sterilization Room (Small)	140	Less than 10 DTRs
Central Sterilization Room (Medium)	240	Supports 11-20 DTRs
Central Sterilization Room (Large)	360	Supports over 20 DTRs
Study/Office	120	per Office. 1 per 2 residents and/or interns at a facility conducting an approved residency and/or internship program

Scrub & Gowning Area	60	Special justification
Cephalometrics	150	1 per orthodontic or surgical services
Model Storage	70	plus 40 NSF per authorized specialty service. 1 per clinic
Orthodontic Laboratory.	110	for first orthodontist. 36 NSF per additional orthodontist. 1 authorized if orthodontist(s) assigned.
Self Preparation Area	20	1 per authorized orthodontist
Dental Support Utility Room	80	only in open bay dental clinics
Soiled Utility/Trash Room	120	

G. NURSING UNITS

1.0 PURPOSE AND SCOPE

This document specifies the space planning criteria for Nursing Units.

Nursing Units, as used in these criteria, do not include the following functional areas which are included in other specific criteria:

<u>Function</u>	<u>Criteria</u>
Examination & treatment facilities other than those required specifically for a nursing unit.	Hospital Clinics
Post-anesthesia recovery Surgery	Surgery
Nurseries, post-partum/ antepartum beds.	OB, Labor & Delivery
Offices for chief/director, assistant chief/directors and administrative assistants/ superintendents of nursing service.	Hospital Clinics or Administrative Activities
Office for physicians nurse practitioners physician administrative activities assistants, social workers, psychologists, etc.	Office for physicians Hospital Clinics or
Offices for nursing service education.	Administrative Activities

2.0 DEFINITIONS

Nursing units are those groups of rooms and facilities that are required for the nursing care of hospital inpatients including intensive, acute and light care patients. These units include, but are not limited to, the following services: Medical -Surgical; Intensive Care; Coronary Care; Psychiatric (including alcohol rehabilitation); Pediatrics; and Light Care. A nursing unit consists of, but is not limited to, the following:

Patient bedrooms with showers, toilets, and lavatories.

Tub rooms and wheelchair showers.

Nurses station area which includes the nursing station with a monitor area, ADP terminal area, nurses workroom/charting area, medication preparation/unit dose drug room, and physician workrooms.

Support facilities which include soiled utility, clean linen room, trash/soiled linen collection, nourishment center/galley/pantry, litter and wheelchair storage, treatment room, supply and equipment area, janitor's closet, Charge/Head nurse office, senior corpsman/NCOIC office, nursing conference room, staff lounge, staff lockers, and staff toilets.

Dayrooms, waiting areas, playrooms, and public toilets.

Light care is that level of supportive health care required by a patient who has a limited health deficit which prevents the resumption of normal activities but who is, at the same time, essentially self-supporting, self-sustaining, and mobile. Because of the minimal level of care required by the light care patient, health facilities to support this patient shall be less extensive than acute care units.

Multi-unit support offices and conference rooms. Multi-unit areas include offices for the: area patient care coordinator (APCC); clinical nursing specialist/instructor; ACPO/NCOIC; unit/supply manager; and conference room. These are areas which support more than one nursing unit.

3.0 POLICIES

The ratio of patient beds in one and two patient bedrooms will be as follows for hospitals with 50 beds or less:

A minimum of 10% or a maximum of 15% of patient beds will be in one-bed rooms.

The remaining 90% to 85% of patient beds will be in two-bed rooms.

The ratio of patient beds in one, two and four patient bedrooms will be as follows for hospitals with more than 50 beds:

A minimum of 10% or a maximum of 15% of patient beds will be in one-bed rooms.

A maximum of 65% of patient beds will be in two-bed rooms.

A minimum of 25% of patient beds will be in four-bed rooms.

Intensive care, coronary care, isolation, and psychiatric seclusion beds are to be excluded in determining patient room ratios.

These ratios are to be applied to total beds, excluding intensive care, coronary care, isolation, and psychiatric seclusion beds and do not have necessarily apply to individual nursing units.

Single Bed Isolation Rooms

Pediatric isolation beds will be programmed on the following basis:

Pediatric Bed Capacity	Number of Isolation Beds
16 or less	2
17 - 25	3
26 - 33	4
34 - 40	5

Medical-Surgical isolation beds will be programmed on the basis of two per Medical-Surgical unit.

Intensive Care isolation beds will be programmed on the basis of one per each four Intensive Care beds.

Psychiatric units do not usually require isolation rooms.

Intensive Care and Coronary Care Units.

The number of Intensive Care Unit (ICU) and Cardiac Care Unit (CCU) beds will be supported by a specific justification.

The justification will address factors such as hospital mission, expected mission change, projected work load, and geographical location. If space is requested for a laboratory to support these special care functions, it will be supported by a similar justification. Guidelines pertaining to ICU and CCU capabilities can be found under the Occupancy Rates chapter of this criteria.

Light Care Beds

Light care bed requirements are determined by analysis of active duty diagnostic categories for which light care beds are appropriate.

Specifically identified light care bed units will be programmed only when there is a requirement for 30 or more light care beds.

When the requirement for light care beds is calculated as 29 beds or less, these beds will be programmed as medical-surgical nursing unit beds based on medical-surgical nursing criteria.

Light care nursing units shall not exceed 50 beds per unit. In the event light care requirements are computed to be between 51 to 59 beds, one to nine beds, respectively, shall be programmed as medical-surgical beds to maintain the planning range of a minimum of 30 beds and a maximum of 50 beds.

While an oxygen and suction system are not required for light care patients, design of light care units will be such that installation of acute-care support systems (i.e., oxygen, suction, etc.) may be added without extensive facility alteration.

Light care beds when constructed in structures housing inpatient activities will comply with Health Care Occupancy requirements of NFPA 101.

Nurses stations and support facilities will be provided as follows:

A nurses station and support facilities will be provided for each medical-surgical, psychiatric, pediatric unit, and light care unit.

Each ICU and CCU unit will have a separate nursing station and support facilities.

No more than 40 beds may be programmed per nursing unit (excluding light care, ICU, and CCU units).

Sub-nurses stations may be included if supported by a justification that addresses decentralization/team nursing concepts, and the availability of adequate staffing to implement such concepts. Support facilities will be centrally located at each nursing and sub-nursing station.

When necessary, multi-units support offices and conference rooms may be programmed on a basis of one complex of rooms per specialty.

Physician Offices: Medical facilities with physicians designated as ward medical officers/unit directors may contain office space on the nursing units when it is determined such offices are required on or adjacent to the nursing units.

Bedrooms:

The planning ranges for bedrooms include space for the bed, patient and visitor seating, and necessary support equipment.

When the toilet and shower space is designed as an offset to the room, and an entry way is created, the space occupied by the entry is circulation space, it is not counted as part of the NSF allowed for the patient bedroom.

Patient bathrooms will consist of one toilet, one lavatory, and one shower. Shower dimensions will be a minimum of nine square feet.

Bathrooms in four-bed rooms will have one shower, one toilet, and one lavatory. A second lavatory will be located within the bedroom.

Bathrooms in ICU and CCU bedrooms do not require showers.

Bathrooms in Pediatric rooms will include a combination tub/shower.

An anteroom with lavatory will be provided for each isolation room.

Nurse servers into the patient bedrooms may be provided when the logistics system entails the use of an exchange cart system.

Seclusion Bedrooms:

Two seclusion bedrooms will be provided for each psychiatric nursing unit, or,

One seclusion bedroom, sized as a typical one patient bedroom, may be provided at hospitals without a planned psychiatric nursing unit.

Each seclusion room will include an anteroom with entry to the bathroom through the anteroom.

Modification of the space criteria may be necessary to meet specific mission requirements but any such modification will require OASD(HA) approval. Special requirements for spaces not covered by this document will be developed on an individual basis and will also require OASD(HA) approval.

4.0 PROGRAM DATA REQUIRED

Bed requirements, by specialty, determined from the DoD bed sizing confidence criteria. (see Introduction Section 1.0)

Identification of teaching/non-teaching hospitals.

Projected male and female staffing requirements by nursing unit.

Analysis of ICU/CCU bed requirements. (if ICU/CCU beds are required)

Determination that a exchange cart logistics system will be employed. (If nurse servers are required.)

Determination that a computerized patient monitoring system will be employed.

Identification and justification for programming any of the following special purpose rooms.

Unit Supply Manager Office, Area Patient Care Coordinator Office, Nursing Section Supervisor Office, Senior NCOIC Office, Clinical Nurse Specialist Office, Nursing Service Section Clerk Office

Determination that an adolescent lounge is required.

5.0 SPACE CRITERIA

The spaces listed below are normally required for nursing units in DoD hospitals. It is not intended that planners include all functional areas listed herein, unless there is a valid requirement at the installation under consideration.

Space planning criteria are listed in the following tables:

FUNCTION	NSF AUTHORIZED				PLANNING RANGE/ COMMENTS	
	<u>M/S</u>	<u>PEDS</u>	<u>ICU CCU</u>	<u>PSYCH REH</u>	<u>LIGHT CARE</u>	
<u>Patient Bedrooms</u>						
One Bed						
Patient Bedroom 140 140 200 NR NR	140	140	200	NR	NR	Patient Bedroom 140 140 200 NR NR
With Mobilization	170	170	200	170	170	
Bathroom	70			70	70	Toilet, shower, lav.
		60				Tub/shower combination
			50			50.No shower, toilet, lav, per each two single rooms
Lavatory (in room)		20	20			
Two Bed Patient Bedroom With Mobilization	220	220	NR	220	220	
Bathroom	70		NR	70	70	Bathroom 70 NR 70 70 Toilet, shower, lav.
		60				Tub/shower combination
Lavatory (in room)		20				
Four Bed Patient Bedroom	440	440	NR	440	440	
Bathroom	70		NR	70	70	Toilet, shower, lav.
		60				Tub/shower combination
Lavatory (in room)	20	20		20	20	
Isolation Bedroom	140	140	200	NR	140	
Bathroom	70	70		NR	70	Toilet, shower, lav.
			50			No shower

Isolation anteroom	60	60	60	NR	60	
Seclusion Bedroom		NR	NR	100	NR	
	140					Programmed only when no psych unit is planned.
Seclusion Anteroom		NR	NR	60	NR	
	60					Programmed only when no psych unit is planned.
Bathroom	70	NR	NR	70	NR	Programmed only when no psych unit is planned. Entry through anteroom.
Nurse Servers	6	8.	8.	6	6	Nurse Servers 6 8 8 6 6 Per bed.
Clothing Wardrobe.	5	5.	5	5	5	Per bed.
<u>Nursing Functions (Per Nursing Unit)</u>						
Nurses Station(includes ADP & monitoring equipment space for ward clerk)	150	150	150	150	150	An additional 5 NSF is required for each bed greater than 40. When unit is 1-4 beds, add 50 NSF for each additional 4.
Sub-Nursing	100	100	100	100	NR.	When justified.
Treatment Room	150	150	NR	150	150	
Workroom & Charting	150	150	150	150	150	
Medication prep/ Unit Dose	90	90	90	90	90	
Nursing Conference/ Report Room	150	150	150	150	NR	
Office	100	100	100	100	100	
NCOIC/Senior Corpsman Office	100	100	100	100	100	
Physician Workroom/ Dictation	150	150	150	150	NR	Physician's workroom may be programmed a teaching hospitals.
<u>Bathing (Per Nursing Unit)</u>	100	100	100	100	100	
Wheelchair Shower	80	80	80	80	80	Not required in ICU/CCU if a Step Down Unit is immediately adjacent or available to the ICU/CCU.
<u>Support Facilities (Per Nursing Unit)</u>						
Clean Linen	100	100	100	100	100	
Clean Utility	150	150	150	100	100	Includes space for patient laundry.
Soiled Utility	120	120.	120	120	120	Includes space for patient laundry.
Equip. Storage	150	200	200	100	100	Additional space may be provided with justification. Orthopedic units Storage

Ortho Equip.	150					only, add 30 NSF per circ - o-lectric bed or turning frame.
Mobile X-Ray Unit Alcove	40	40	40	NR	NR	One space per each specialty or one per 90 beds.
Emergency Equip. Alcove	20	20	20	20	20	Crash Cart
Nourishment Center/Galley/ Pantry	100	100	100	150	100	
Litter/Wheel Chair Storage	80	80	80	80	80	Additional 10 NSF for each 10 beds over 30 beds per unit.
Janitor's Closet	40	40	40	40	40	
Computer Room	NR	NR	70	NR	NR	When required for patient monitoring.
Laboratory	NR	NR	100	NR	NR	Blood Gas. When justified.
Admission/Interview Room	NR	100	NR	100	NR	
<u>Dayrooms/Waiting Areas/Group Rooms (Per Nursing Unit)</u>						
Dayroom	200	200	NR	200	200	minimum or 10 NSF per bed whichever is greater
Waiting Room	NR	NR	150	NR	NR	Waiting Room NR NR 150 NR NR 16 NSF per bed or 150 NSF whichever is greater
Group Activity Room	NR	NR	NR	300	NR	300 + 14 NSF for each bed greater than 20
Group Therapy	NR	NR	NR	300	NR	300 + 14 NSF for each bed greater than 20
Playroom	NR	150	NR	300	NR	150 + 10 NSF for each bed greater than 20
Playroom Storage	NR	50	NR	300	NR	
Adolescent Lounge	NR	150	NR	300	NR	.150 + 10 NSF for each bed greater than 20. Individual Study
<u>Staff Lounge/Lockers (Per Nursing Units)</u>						
Staff Lounge						10 NSF per staff member greater than 10. 200 NSF max. Special Care areas = 10 NSF
Male	100	100	100	100	100	
Female	100	100	100	100	100	100 NSF min.
<u>Staff/Public Toilets</u>						
Toilet/Lav	50	50	50	50	50	3 per unit one in each locker room & one at nursing station.
Public Toilet						

Men, (wc., Lav, urinal)	90	90	90	90	90	30 NSF per
Women (wc., Lav.)	60	60	60	60	60	one per nursing unit. 30 NSF per fixture.

NOTE: Quantity of public toilets may be less dependent upon quantity and location of nursing units; consolidation is encouraged.

Multi-Unit Areas/Rooms

Conference Room.	*	*	*	*	*	1 per 25-90 bed facility at 300 NSF.
	200	200	200	200	200	Greater than 90 beds, may program one per nursing specialty
Trash/Soiled Linen Collection	100	100	100	100	100	One room per two nursing units.
Consultation Room	100	100	100	100	100	One room per two nursing units.

Special Purpose Room: Limited to facilities w/designated requirements.

Unit Manager	100	100	100	100	100	One per nursing specialty or 1 per 3 units if nursing service greater than 60 beds.
Area Patient Coordinator/ Nursing Section Supervisor Office	100	100	100	100	100	One per nursing specialty or 1 per 3 units if nursing service greater than 60 beds.
Senior NCOIC Office	100	100	100	100	100	One per nursing specialty or 1 per 3 units if nursing service greater than 60 beds.
Nurse Clinical Specialist	100	100	100	100	100	One per nursing service or 1 per 3 units if serving greater than 60 beds.
Nurse Services Section clerk	100	100	100	100	100	One per nursing service or 1 per 3 units if serving greater than 60 beds.
Quality Assurance	100	100	100	100	100	1 per nursing facility when FTE assigned
Infection Control	100	100	100	100	100	1 per facility when FTE assigned
Patient Teaching Area	120	120		120	120	1 per ward, where ward has at least 32 beds

K. PATHOLOGY Updated 29 Jan 93

1.0 PURPOSE AND SCOPE

This document specifies the space planning criteria for the Pathology Department/Service in DoD medical facilities.

Pathology Department criteria provide the specialized environment and facilities for the receipt, processing, and qualitative/quantitative laboratory analysis of all inpatient and outpatient pathological specimens and tissues and the corresponding recording and reporting of test results to appropriate services.

2.0 DEFINITIONS

Clinical Pathology - Encompasses the functions of chemistry, urinalysis, hematology, microbiology, serology, and blood banking.

Anatomical Pathology - Comprises histopathology, cytology, electron microscopy, photomicrography, autopsy, and cytogenetics.

Laboratory Module - Represents the space, storage, and equipment required for two technicians to work comfortably and efficiently. It provides each technician with sit-down work space with chair and storage. Shared services include a sink and refrigerator and space for placement of free standing equipment without encroaching upon circulation space.

College of American Pathologists (CAP) work units are standardized measures of how many minutes of technical and clerical time is required for a given laboratory technique. The values can be found in the College of American Pathologists' "Manual for Laboratory Work load Recording Method." Pathology work load is reported in CAP work units in the MEPRs data system.

3.0 POLICIES

The concept of operation for pathology is based on the separation of the physical facilities into two functional divisions: clinical and anatomical pathology. It is also based on the central control for specimen processing, whereby specimens are received and logged at one point and distributed to appropriate work centers based on priority of accomplishment required. Reports of analysis are returned to the same central control point which completes the chain of action. The work areas are composed primarily of laboratory modules in standard configurations grouped according to function.

The standard operation of pathology is based on 8 hours per day, 5 days per week. However, the STAT Lab portion of clinical pathology normally operates 24 hours per day, 7 days per week. Specimen receiving includes desk space, machine stand and access to a refrigerator/freezer, material handling terminal and cart storage if applicable.

Transcription provides space for central dictation recording equipment and individual areas for transcriptionists including area for a desk, dictation outlet, computer terminal (if possible), and machine stand.

Record storage provides space for the file storage of laboratory records and reports in a standard filing cabinet arrangement.

Storage space is provided for open shelf storage units with an entirely separate, securable storage area for hazardous materials.

Media and solution preparation -- space is provided for a standard laboratory module with a fume hood.

Decontamination includes space for work counter with sink, storage and sufficient space and circulation to accommodate soiled material carts.

Open lab space is provided for standard laboratory modules grouped without dividing partitions.

Blood bank -- space is provided for separate, environmentally remote standard lab modules with sufficient space and access

for unit blood refrigerator and attendant alarm systems, as well as space for donor areas.

Microbiology labs -- space is provided for standard laboratory modules with separate, enclosed modules for each discipline; each provided with sufficient space for a laminar fume hood. Space for a prefabricated type, insulated walk-in incubator is provided.

Histopathology -- Work centers include space for gross specimen cutting area with sink, accessible instrument display, fume hood, dictation apparatus and storage; a paraffin impregnation area with sufficient space and clearance to accommodate automated machines and block cooling; a frozen sections preparation area, including space for microtome knives and cryostats; a slide staining and preparation area with slide storage and fume hood; microscope viewing area, including space for dictation. This allowance does not dictate the distribution of the space to a specific function; rather, it provides adequate space that will be allocated to functions during the design process.

Tissue specimen storage space is provided with open shelving for the storage of boxed paraffin blocks and bottled gross specimens, and an area for slide files.

Cytology lab space is provided for standard laboratory modules within one enclosed area, including space and access for fume hood, slide staining and separation and storage.

Autopsy/morgue space is provided for an autopsy table with four-sided access, a gross cutting area, scale, limited refrigeration facilities and storage facilities for specimen displays. Space is also provided for refrigerated storage of cadavers and access to the roll-out shelves when fully extended. Cleanup space is provided including a scrub sink, clean supply and instrument storage, and work counter.

Number and Mix of Laboratory modules.

a. Medical Expense and Performance Reporting System (MEPRs) weighted procedures will be used for determining the number and types of Laboratory Modules. These weighted procedures are equivalent to CAP "work units" and will be referred to as such.

b. The number of Laboratory Modules in each functional area is determined by projected annual CAP work units according to the following formula:

$$\text{Laboratory Modules} = (\text{annual CAP work units}) / 132,000$$

where 132,000 represents an estimate of the number of annual minutes of work time supplied by two technicians (i.e., it is a two-man module). For space planning purposes, expansion is permitted in "half-modules" using rounding to the nearest .5. For example, if the formula give 1.3 modules, space can be planned for 1.5, while if the formula gives 1.2, space can be planned for 1.0. For convenience, a table relating CAP work units to Laboratory Modules (in units of .5) is given below.

c. Laboratory Module Planning Table

<u>CAP Work Units Per Year</u>	<u>Lab Modules</u>
33,000 - 99,000	0.5
99,001 - 165,000	1.0
165,001 - 231,000	1.5
231,001 - 297,000	2.0
297,001 - 363,000	2.5
363,001 - 429,000	3.0
429,001 - 495,000	3.5
495,001 - 561,000	4.0
561,001 - 627,000	4.5
627,001 - 693,000	5.0
693,001 - 759,000	5.5

759,001 - 825,000	6.0
825,001 - 891,000	6.5
891,001 - 957,000	7.0
957,001 - 1,023,000	7.5
1,023,001 - 1,089,000	8.0

Graduate medical education and other training programs will be considered when planning training space. Individual study and specific justification must be provided by the facility.

Additional lab modules - space factor - for training - individual study. Comment in Section 3.

4.0 PROGRAM DATA REQUIRED

Total laboratory CAP work units per year

Total laboratory CAP work units for the following categories:

Chemistry
Hematology
Immunology/Serology
Urinalysis
Microbiology
Parasitology/feces
Blood banking
Histopathology
Cytology
Virology
AIDS
Staffing requirements

Annual autopsy procedures
Annual average deaths
Annual whole blood donations
Annual phoresis donations

5.0 SPACE CRITERIA

Laboratory Modules: Number and Sizes

Laboratory modules in each of the following areas are planned according to the table given above in section 3.0, based upon annual CAP work units in each area, and are sized according to the following table:

<u>Module</u>	<u>NSF</u>	<u>Comments</u>
Chemistry	280	All modules
Hematology/ Immunology	170	170 include
Serology	200	refrigerator/ freezer space.
Urinalysis	200	
Microbiology	250	
Parasitology/feces	250	

Blood Banking	160
Histopathology	220
Cytology	160
Virology	250

If the projected annual CAP work units in any of the above areas is less than 33,000 the areas may be combined as follows to determine the number of regional lab modules.

Group A -	Chemistry, Urinalysis
Group B -	Hematology, Immunology/Serology, Blood Banking
Group C -	Microbiology, Parasitology/feces, Virology
Group D -	Histopathology, Cytology

In each group where there is a work load, a minimum of one module is provided.

Updated 29 Jan 93

FUNCTION	NSF AUTHORIZED	PLANNING RANGE/COMMENTS
<u>Technical Work Elements</u>		
Control	120	per department
Specimen Receiving	100	minimum. Add 20 NSF for each 10 lab modules in excess of 20
Specimen	100	minimum. Add 20 NSF for each 35
Collection Blood Drawing		specimens or portion thereof in excess of 70 per day (includes space for litter)
Waiting Area	80	minimum. 16 per seat, 25 per handicapped seat 1 seat per 10 specimens per day, 80 NSF minimum, 5% of seating is handicapped
Specimen Storage	100	plus 2 NSF per lab module
Urine Collection Toilet (M)	50	1 wc, 1 lav single occupancy per increment of 30 specimens/day
Urine Collection Toilet (F)	50	1 wc, 1 lav single occupancy per increment of 30 specimens/day
Blood Donor Area Interview Area	80	1 per 4 blood stations
Donor station	80	Per station. # of stations = <u>Whole Blood donors/day x 25 /360</u> (work minutes per day) + <u>Phoresis</u> /2 per day
Recovery Area	150	per facility
Computer	*	Special study required
Transcription	100	minimum or 80 NSF per assigned clerk if more than 1
Storage/Records	50	minimum; 50 per assigned clerk
Control/Clerical	100	minimum, or 80 NSF per transaction control clerk programmed over 1
Storage/Central	50	minimum; or 10 NSF per lab module
Media and Solution Prep	220	per department with over 25 lab modules

Decontamination Room	100	add 50 NSF for each 25 lab modules in excess of 25
Room in excess of 25	Room in excess of 25	Room
Glassware Washing	100	Special justification required.
Satellite Lab		Satellite Lab Individual study required. Will be portion of the total Lab Allocation. There will be no additional space programmed.

Clinical Pathology

Incubation Room	10	per microbiology and parasitology module over 2 modules
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Anatomical Pathology

Tissue Storage	60	per histology module,
	40	per cytology module; 50% may be noncontiguous to lab.

Autopsy:

	280	per table # tables = $\frac{\text{annual autopsy proc}}{200}$
change area	100	lockers
	30	Per fixture; staff toilets
	30	per shower
body holding	25	per space. # spaces = $\frac{\text{annual average deaths}}{50}$ (round at 0.2)(one minimum)
body prep area	100	1 per facility where no autopsy room is provided.
ante/viewing room	100	1 per facility
tissue storage	25	minimum; 1 NSF per annual autopsy proc.

Staff Support

Pathological Waste Holding	40	plus 20 NSF per 10 modules greater than 15. 150 NSF maximum
Archives and Record		Space allocation required. Individual study.
Lockers		
Male	100	minimum. add 6.5 NSF per locker for each FTE mbr. over 15.
Female	100	minimum. add 6.5 NSF per locker for each FTE mbr. over 15.
Toilet		
Male (wc, lav)	60	30 NSF per fixture (lav, wc) per 20 men
urinal	30	one per 40 men or fraction thereof
Female (wc, lav)	60	30 NSF per fixture per (lav. wc) 15 women
On Call Alcove	100	
Lounge	100	minimum; Plus 10 NSF per tech greater than 10, 200 NSF maximum
Housekeeping	40	per 30 modules or portion thereof

Administrative Areas**Offices:**

Chief of Pathology	140	
Secretary/Waiting	120	additional justification required for more than 1
NCOIC 100	100	
Conference Room	100	plus 20 NSF per officer. max 200.
Pathologist	100	

Laboratory Office	100	minimum, or 80 NSF per officer greater than 1
Bulk Supply Rec/Ship	.	Space allocation required. Individual study.
<u>Teaching Facilities</u>		
Instructor's Office	100	1 per instructor
Resident's Office	100	minimum or 80 NSF per resident
Teaching Files	300	1 per teaching facility
Library Classroom /Conference	300	minimum or 250 plus 10 NSF per resident. 1 per teaching facility.
<u>Medical Photography</u>		
Non-teaching Hospitals		
Dark room	150	includes film processors and enlarger
Print processor Area	100	black and white and color
Studio	400	
Change area	80	Includes two booths and space for four patient lockers
Supply & storage	100	
NCOIC	100	If more than one man shop
Administration	100	minimum or 80 NSF per employee
Teaching Hospitals		
Dark room B & W	100	includes film processors
Dark room Color	100	includes film processors
Print processor	100	black and white
Print processor	100	Color prints
Color Slide Processor	130	
Copy Laboratory	600	Includes light side of copy camera.
Darkroom	300	Includes processing sink for copy camera negatives.
Finishing Area	150	For assembly and distribution of final projects
Full Length Studio	400	for full length medical photography
Medical Studio	150	
Change area	80	Includes two booths and space for four patient lockers
Supply and storage		
Supply Admin	100	minimum or 80 NSF per assigned tech.
Walk-in refrigerator	100	Film and supply breakout
Walk-in Freezer	125	Film, and paper storage
Chemistry Store	120	
Dry Storage	120	
Secure Storage	50	Combine with supply admin for storage of Photographic equipment.
NCOIC	100	If more than one man shop
Administration	100	minimum or 80 NSF per employee

L. PHARMACY

1.0 PURPOSE AND SCOPE

This document specifies space planning criteria for Pharmacy services. It does not contain space criteria for specialized clinical pharmacy functions. These functions will be found in the criteria for the services supported which are:

Hematology/Oncology: See Outpatient Clinic Criteria.

Radiopharmacy: See Nuclear Medicine Criteria.

2.0 DEFINITIONS

Drug Information Service - The objective of this aspect of Clinical Pharmacy Service is to provide complete drug information, upon request, to medical officers, and other staff members. This function may be facilitated by subscribing to the Iowa Drug Information Service which includes drug literature from over 150 medical and pharmacology journals recorded on microfilm. This system should be supplemented with selected text books and other references.

Satellite Pharmacy - Additional operation locations (inpatient and/or outpatient) which will supplement and support the main inpatient and/or outpatient pharmacies by diverting a portion of the work load to another dispensing area to facilitate a better work and patient flow.

Clinical Pharmacist - A pharmacist with specialized education and training in the principles of disease processes and pharmacotherapeutics. May have special expertise in highly specialized areas such as pharmacokinetics, research, hematology/oncology, or radiopharmacology.

3.0 POLICIES

The locations, quantities, and types of pharmacy dispensing activities will be determined by work load, the location of activities supported and the projected number of supervisory personnel.

Outpatient Pharmacy should be located near and readily accessible to the outpatient clinics.

Inpatient Pharmacy:

- a. Medical facilities with more than 100 beds should have a separate inpatient pharmacy.
- b. This activity must be readily accessible to the nursing unit to facilitate the drug distribution process.
- c. The main inpatient pharmacy and satellites should (where feasible) be linked to the main pharmacy by a dedicated materials handling system that is capable of transporting bulk medications.

Satellite Pharmacies:

- a. Medical facilities with work loads that generate space authorizations for satellite pharmacies may combine the satellite space with the main pharmacies instead of programming the separate satellites.
- b. Adequate numbers of supervisory personnel should be projected to supervise the number of pharmacy operating locations program.
- c. Each inpatient pharmacy location will be provided with its own unit dose and IV admixture functions.

A delivery system capable of transporting intravenous solutions, immediate medication doses, and physician orders between the inpatient pharmacies and the nursing units will be provided.

The drug information service should be located adjacent to the inpatient pharmacy administrative area.

These criteria provide separate space for inpatient pharmacy bulk storage and outpatient pharmacy bulk storage. This space may be combined provided a dedicated materials handling system directly links the bulk storage area to the main pharmacies.

4.0 PROGRAM DATA REQUIRED

(Raw work load data will be used without MEPRS weighting.)

Projected average outpatient prescriptions per month.

Projected Average Daily Patient Load (ADPL).

Projected average number of IV admixtures prepared per month.

Staffing (Projected to be available)

Pharmacists

NCOIC

Secretary/Receptionists

Technicians

Trainees

Clerks

5.0 SPACE CRITERIA

FUNCTION	NSF AUTHORIZED	PLANNING RANGE /COMMENTS
<u>Administrative Support</u>		
<u>Offices</u>		
Dept. Chairman/Chief	140	
Dept. Vice Chairman/ Asst. Chief	120	Medical Centers
Staff Pharmacists	100	Per staff Pharmacist
<u>Staff Support</u>		
Superintendent/NCOIC	100	
Secretary/Reception	120	When Authorized
Clerical/Admin.	100	minimum or 80 NSF per clerk over 1
Conference/Training Room	200	Authorized in facilities of 200 beds or more.
Data Automation	20	Per terminal/ printer where used.
Janitor's Closet	40	1 per Pharmacy
Lounge	100	minimum; Add 10 NSF/staff greater than 10; 200 min.
Lockers		
Male	100	minimum; 6.5 NSF/locker per FTE assigned over 15
Female	100	minimum; 6.5 NSF/locker per FTE assigned over 15
<u>Toilets</u>		
Male (wc, lav)	60	30 NSF/fixture per 20 men
urinal	30	one per 40 men or fraction thereof

Female (wc, lav)

60

30 NSF/fixture per 15 women

NSF/PROJECTED AVERAGE OUTPATIENT PRESCRIPTIONS (RX) PER MONTH**Outpatient Main Pharmacy**

<u>Rx Range</u>	<u>Main Dispensing</u>	<u>FORMS WRITING</u>	<u>Main Waiting Area</u>
1-5,000	300	10	300
5,001-25,000	400 + (100/5,000 RX in excess of 10,000)	20	400 +(100/5,000 RX in excess of 10,000)
25,001-35,000	700+100 if RX exceeds 30,000	20	700
35,001-50,000	800	30	700
50,001+ 30 700	900 + (100/10,000 over 55,000)	30	700

NOTE: Includes space for storage of active drug stocks

	<u>Satellite #1 Dispensing</u>	<u>Forms Writing</u>	<u>Satellite #1 Waiting</u>
1-5,000			
5,001-25,000	200 if RX exceeds 20,000	10	100 if RX exceeds 20,000
25,000-35,000	300	20	150
35,000-50,000	200 + 100 if RX exceeds 40,000	20	100 + 50 if RX exceeds 45,000
50,000+	300	0	150

	<u>Satellite #2 Dispensing</u>	<u>Forms Writing</u>	<u>Satellite #2 Waiting</u>
1-5,000			
5,001-25,000			
25,000-35,000	200 + 100 if RX exceeds 45,000	10	100 + 50 if RX exceeds 45,000
50,000+	300	20	150

Bulk Storage - 100+100/5,000 RX in excess of 5,000. Maximum 1,000 NSF (Includes space for receiving, breakdown, sorting, and storage).

Manufacturing & Pre-pack - 200 + 100/10,000 RX in excess of 10,000 (May be combined with inpatient mfg. & pre pack.)

Updated 18 Feb 92

NSF/PROJECTED AVERAGE IV ADMIXTURES PER MONTH**Inpatient Pharmacy**

<u>Rx Range Admixture</u>	<u>Main Pharmacy IV Admixture</u>	<u>Satellite #1 IV</u>
1-2,000	300	
2,001- 6,000	300 + (50/1,000 IV Admix in excess of 3001)	
6,001- 9,000	350 + (50/1,000 IV Admix in excess of 7001)	200
9,001-15,000	400 + (50/1,000 IV Admix in excess of 10,001)	200
15,000+	450 + (50/1,000 IV Admix in excess of 16,001)	200

NOTE: Includes space for bulk storage of IV additives and limited supply of bulk solutions.

<u>RX Range Admixture</u>	<u>Satellite #2 IV Admixture</u>	<u>Satellite #3 IV Admixture</u>
1-2,000		
2,001- 6,000		
6,001- 9,000		
9,001-15,000	200	
15,000+ 200	200	200

NSF/PROJECTED AVERAGE DAILY BEDS OCCUPIED

<u>RX Range</u>	<u>Main Pharmacy Unit Dose Drug Distribution</u>	<u>Satellite #1 Unit Dose</u>
1-50	200	
51-200	300 + 100 if ADPL exceeds 100	
201-500	300 + 100/100 ADPL in excess of 300	200
501-700	600 + 200 if ADPL exceeds 600	300 + 100 if ADPL exceeds 600
701-900	900 + 100 if ADPL exceeds 800	300 + 100 if ADPL exceeds 800
900+	1,200	200 + 100 if ADPL exceeds 1,000

NOTE: Includes space for storage of active drugs stock and carts

<u>RX Range</u>	<u>Satellite #2 Unit Dose</u>	<u>Satellite #3 Unit Dose</u>
501-700	501-700 200 if ADPL exceeds 600	
701-900	200	200 if ADPL exceeds 800
900+	200+100 if ADPL exceeds 1,000	200

NSF/PROJECTED AVERAGE DAILY BEDS OCCUPIED

<u>RX Range</u>	<u>Bulk Storage</u>	<u>Mfgr & Pre-pack/ Bulk Orders</u>
1-50	300	150
51-200	400 + 100 if ADPL exceeds 100	200 + 100 if ADPL exceeds 100
201-500	600 + 100/100 if ADPL exceeds 300	400 + 100/100 if ADPL exceeds 300
501-700	850 + 50 if ADPL exceeds 600	600 + 100 if ADPL exceeds 600
701-900	950 + 50 if ADPL exceeds 800	700
900+	1,000	700

NOTE: Includes space for supply mgmt/administration.

NSF/PROJECTED AVERAGE OUTPATIENT PRESCRIPTIONS PER MONTH

<u>Rx Range</u>	<u>Controlled Drug Area</u>	<u>Flammable/Poison Storage</u>
1-5000	25 _a	10 _b
5,001-30,000	75	30
30,001-40,000	100	30
40,000+	150	30
NOTES	_a 50 cubic foot safe	_b Metal locker

Clinical Pharmacy Services**NSF/PROJECTED AVERAGE DAILY BEDS OCCUPIED**

Range	1-150	151-500 501 +
Drug Information	c	200 400

Services

Special Study

:

P. VETERINARY SERVICES

1.0 PURPOSE AND SCOPE

This document specifies the space planning criteria for veterinary service at all DOD military installations.

Space planning criteria, as outlined in other functional criteria sections, such as administrative areas, toilets, lockers, housekeeping and so forth, will be used as required to supplement veterinary service criteria.

2.0 DEFINITIONS

Veterinary Facility. A medical department facility equipped and staffed to perform the entire spectrum of veterinary services required by a military installation. Normally, a veterinary facility will include: Offices for the Veterinarian and section chiefs; conference room/library; food inspection room; waiting room for visitors/outpatients; veterinary examination/treatment rooms; veterinary surgery room; X-ray facilities; pharmacy; clinical laboratory room; inside rabies quarantine kennel rooms; inside-outside kennel area for hospitalized Government owned animals; toilets and showers; employee lounge; locker and dressing rooms; linen room; and storage space for records, supplies, and cleaning equipment.

Veterinary Food Inspection Room. A room adequately equipped for the performance of installation food testing and examination procedures.

Veterinary Examination/Treatment Room. A room adequately equipped for the performance of professional veterinary examinations and treatments.

Veterinary Surgery Room. A room with adequate space designed and adequately equipped for the performance of aseptic surgical procedures on nonhuman animals.

Veterinary Waiting Room. A room with adequate space to permit the entering of animals without contact with the animals/owners already present.

NOTE: Military working dogs must be handled in such a way that there will be no eye contact or possible physical contact between military and civilian animals. Military working dogs should enter through a separate entrance.

Rabies Quarantine Kennel Room. A separate room designed and equipped to house rabies suspect animals. NOTE: No more than one animal will occupy the same cage or kennel at the same time.

Hospitalization Kennel Area. A kennel facility adequately equipped with inside -outside kennels to hospitalize animals.

Government Owned Animals. Animals purchased and/or maintained with appropriated funds, for the accomplishment of an authorized mission.

Veterinary Clinic Laboratory. As used in this document, a laboratory of limited capability within a veterinary clinic to be used in the performance of certain diagnostic tests.

Pharmacy Storage Area. An area designated and equipped for the storage and bulk dispensing of veterinary pharmaceutical supplies. Individual prescriptions are not filled from this area.

Space. All space measures are expressed in net square feet (NSF).

Inside-Outside Kennel. A kennel inside a building with an attached, partially covered, outdoor run. The indoor and outdoor areas are attached by a guillotine type door to allow isolation of the animals during cleaning operations.

Stray Animal Confinement Facility. A kennel facility separate from the rabies quarantine room and hospitalization kennels which is used to confine animals apprehended as strays.

3.0 POLICIES

The space planning criteria as outlined in this document are provided as guidance to assist in the development of veterinary facilities essential for high quality service. Modification of the criteria may be necessary to meet specific mission requirements but any such modification will require OASD(HA)

approval. Specific requirements for facilities not covered by this document will be developed on an individual basis and will also require OASD(HA) approval.

The complete scope of the veterinary mission and the total number of veterinary personnel authorized to an installation will be used as a basis for establishing future facility projections. The current personnel authorized will be adjusted for planned changes in mission, changes in population served, changes in the practice of veterinary medicine, and other factors as may be pertinent.

Veterinary facilities will be consolidated into the minimum number of facilities consistent with providing effective and efficient veterinary services. Veterinary facilities may be combined with other medical service facilities when feasible.

All construction will conform to Title 9, Code of Federal Regulations, Chapter 1, Subchapter A - Animal Welfare.

At DoD installations where one or more Army Veterinary Corps Officers are assigned for regular duty, veterinary facilities will be established.

The spaces listed below are normally required for veterinary support at installations. It is not intended that planners include each functional area listed herein, unless there is a valid requirement at the installation under consideration.

- (1.) Office of the Chief Veterinarian
- (2.) Administrative Support Area
- (3.) Conference Room - Library
- (4.) Food Inspection and Laboratory Area
- (5.) Veterinary Examination/Treatment Rooms
- (6.) Veterinary Surgery Room
- (7.) X-ray Exposure & Radiographic Film Development Rooms*
- (8.) Pharmacy Storeroom
- (9.) Clinic Laboratory Area
- (10.) Utility and Supply Area (for Clinic)
- (11.) Rabies Quarantine Kennels
- (12.) Hospitalization Kennels
- (13.) Utility Area (for Kennels)
- (14.) Veterinary Clinic Reception and Control Area
- (15.) Patient Handler Waiting Area
- (16.) Clinic Records Holding Area
- (17.) Toilets, Showers, Locker Rooms
- (18.) Employees' Lounge
- (19.) Custodial Facility
- (20.) Stray Animal Confinement Kennels

* Where the number of X-ray exposures is expected to remain at a low level, one treatment room should be lead lined for use as a part time X-ray exposure room, and no dedicated X-ray exposure room will be provided.

4.0 PROGRAM DATA REQUIRED

Number of veterinary officers assigned _____
 Number of veterinary technicians assigned _____
 Number of military working dogs supported _____
 Number of outpatient visits per year _____
 Number of rabies suspects per year _____
 Number of personnel assigned to food inspection activities _____
 Number of stray animals confined per year _____

5.0 SPACE CRITERIA

FUNCTION	NSF AUTHORIZED	PLANNING RANGE /COMMENTS
-----------------	-----------------------	---------------------------------

Administration

Chief Vet Services	140	One per facility
Office, Veterinarian	100	One per veterinarian assigned
Secretary	120	One per facility. Includes 2 visitor chairs.
NCOIC	100	One per facility
Administrative Office	100	minimum of 80 NSF per NCO or vet technician that requires an office whichever is greater.
Conference Room/ Library	200	Only when 14 or more FTE staff are assigned. If less than 14 FTE staff assigned, add 40 NSF to lounge and combine functions.
Control Area	110	One per clinic
Waiting	200	minimum plus 14 NSF per exam/treatment room greater than three

Treatment Areas

Examination/Treatment	100	Examination/Treatment 100 One per assigned Veterinarian including Chief Veterinarian
Veterinary Surgery	200	Authorized only when 10 or more military working dogs are assigned to the installation.
X-Ray Exposure Room	150	Authorized only when 1,000 or more annual outpatient visits are planned. If less than 1,000 annual outpatient visits, combine into an exam/treatment room.
X-Ray Film Darkroom	50	One per X-Ray exposure room.
Pharmacy	110	minimum plus 10 NSF per each additional 1,000 annual outpatient visits.
Laboratory	100	minimum plus 10 NSF per each additional 1,000 annual outpatient visits. If annual outpatient visits less than 1,000, combine with Pharmacy.

Holding and Quarantine

Rabies Quarantine Area	40	per canine, minimum 2 per fac. per feline, minimum 2 per fac. Add one canine and one
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	10	feline per each 12 estimated suspects per year greater than 24.
Hospitalization Kennel	60	Minimum of 2 inside-outside kennels plus 60 NSF per each 10 military working dogs assigned greater than 20.
Stray Animal Confinement Kennels	40	Canine, minimum 2 per facility
	10	feline, minimum 2 per facility. Add one canine and one feline for each 24 estimated strays greater than 48 per year.
Utility and Storage Area	150	One per Holding/Quarantine area.

Food Inspection Activities

Food Inspection Room	350	minimum. If more than 4 vet technician/officers assigned to food inspection activities add 90 NSF for each additional veterinary technician/officer assigned.
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Support Areas

Housekeeping	60	minimum plus 60 NSF for each 5,000 NSF greater than 5,000.
Clean Utility	100	one per facility
Storage	200	one per facility
Staff Toilet		
Male	60	30 NSF per fixture, (lav, wc) per 20 men assigned.
Urinal.	30	1 per 40 men or fraction.
Female	60	Female 60 30 NSF per fixture, (lav, wc) per 15 women assigned.

Lockers

Male	100	minimum, plus 6.5 NSF per male greater than 15
Female	100	minimum, plus 6.5 NSF per female greater than 15
Lounge	150	one per facility.

Q. CLINICAL INVESTIGATION FACILITIES

1.0 PURPOSE AND SCOPE

This section specifies the space planning criteria to be used for Department of Defense (DoD) Clinical Investigation Facilities (CIF). These criteria provide the specialized environment and facilities for the receipt, processing, and housing of laboratory animals used for medical/dental research. In addition, it provides space for staff support, laboratory support, supply/equipment storage, and a surgical area.

2.0 DEFINITIONS

American Association for Accreditation of Laboratory Animal Care (AAALAC) This nonprofit organization was formed in 1965 by leading US scientific and educational organizations to promote high quality animal care and use through a voluntary education program. The guidelines by which this organization inspects all facilities is the **Guide for the Care and Use of Laboratory Animals**.

Animal Research Facility Any research facility that uses or intends to use live animals in research, tests, experiments, or instructional programs.

Clinical Investigation All medical research activities carried out for the purpose of studying either basic science or clinical issues relating to the health and wellbeing of DoD beneficiaries. Most clinical investigation will be carried out in support of graduate medical education programs and supported with designated clinical investigation funds.

Department of Defense Directive Number 3216.1, 1 Feb 82 "The Use of Animals in DoD Programs." This directive establishes uniform policies, procedures, and responsibilities among DoD components involved in the use of animals. It states that the Clinical Investigative Facility must seek accreditation from the AAALAC.

Guide for the Care and Use of Laboratory Animals This is a National Institute of Health Publication by the Department of Health and Human Services which provides additional guidance on housing, caring for, and using laboratory animals.

Medical Research Facility Any school (except an elementary secondary school), institution, organization, or person that conducts clinical investigation or other medical research.

Quarantine The separation of newly received animals from those already in the facility until the health of the newly received animals has been evaluated.

The Laboratory Animal Welfare Act of 1966, Subsequent Amendments, and Implementing Regulations Requires the licensing of dealers, identification of animals, maintenance of records, submission of reports, and compliance with standards for the humane handling, care, treatment, and transportation of animals by dealers and research facilities.

Vivarium An enclosed indoor place for keeping and studying terrestrial animals.

3.0 POLICIES

Proper management of animal facilities is essential to the welfare of animals, validity of research data, and health and safety of the animal care staff. Specifically, the animal research laboratory should:

- a. Provide for a caging or housing system that facilitates animal wellbeing, meets research requirements, and minimizes experimental variables. This includes providing space that is adequate, permits freedom of movement, has a resting place, adequate ventilation, meets the biological needs of animals, and provides easy access to food and water.
- b. Meet minimum space recommendations for laboratory animals as outlined in the **Guide for the Care and Use of Laboratory Animals**.
- c. Provide for pens, runs, or other outofcage space for larger species to allow more opportunity for exercise when being held for longer periods of time.

d. Allow for the effective control of the physical environment in terms of humidity, temperature, ventilation, illumination, and noise.

e. Designate areas for bulk storage of food that are

cool, dry, clean, and free of vermin and other potential contaminants. Additionally, bedding should be kept in an area that is off the floor on pallets, racks, or carts.

f. Ensure that animals have continuous access to fresh, potable, uncontaminated drinking water, according to their particular requirements.

g. Establish the use of mechanical equipmentwashing machines. Some means of sterilizing equipment and supplies, such as an autoclave or gas sterilizer, is essential when pathogenic organisms are present or for some specialized facilities or animal colonies.

h. Collect and dispose of waste in a safe and sanitary manner. All 50 states require incineration of all animal bedding and carcass material.

4.0 PROGRAM DATA REQUIRED

a. Number of Veterinary and Medical Officers assigned	_____
b. Number of Administrative personnel assigned	_____
c. Number of Microbiologists assigned	_____
d. Number of Biochemists and research chemists assigned	_____
e. Number of Histologists assigned	_____
f. Number of Immunologists assigned	_____
g. Number of Hematologists assigned	_____
h. Number of Physiologists assigned	_____
i. Number of Statisticians assigned	_____
j. Number of Nurse Researchers assigned	_____
k. Number of technicians (e.g. laboratory, surgical, veterinary, physiology) assigned	_____
l. Number and Types of animals used	_____
m. Number and types of protocols/year (i.e. active, training)	_____
n. Number of researchers per year not covered above	_____
o. Types of courses held at the Clinical Investigation Facility, frequency, and number of attendees/instructors	_____
p. Type, number, duration, and numberof participants in associated Graduate Medical Education programs	_____

5.0 SPACE CRITERIA

FUNCTION	NSF AUTHORIZED	PLANNING RANGE /COMMENTS
<u>Administration</u>		
Office, DirectorCIF	140	140 One per facility.
Secretary	120	Includes computer space and waiting.
Office, Veterinarian	100	One per veterinarian.
Office, Physician	100	One per physician.

Office, Scientist	100	One per scientist.
<u>Administration</u>		
Office, Admin. Officer	100	If authorized.
Office, Technicians	80	Per technician.
Conference Room/Library	200	Minimum. Additional space requires justification.
Copier/Reproduction	80	One per facility.
Active Files	100	One per facility. Individual study.
Archive Storage	100	One per facility. Individual study.
<u>Laboratories</u>	*	Justification required for <u>all</u> items
Biochemistry Module	300	*Individual study.
Isotope Room	100	*Individual study.
Microbiology Module	250	*Individual study.
TB/Mycology Module	300	*Individual study.
Tissue Culture Module	300	*Individual study.
Histo/Path Module	220	*Individual study.
Cardiopulmonary Module	300	*Individual study.
Hematology Module	170	*Individual study.
Chemistry Module	280	*Individual study.
Hyperbaric Proced. Room		*Individual study. (size dependent on facility workload)
Nuclear Medicine	500	*Individual study
Grossing Room	150	Grossing Room
Electronmicroscopy	200	*Individual study.
Darkroom	90	*Supports electron microscope. Individual study.
Print Room	100	*Supports electron microscope. Individual study.
Prep Room	100	*Supports electron microscope. Individual study.
<u>Laboratory Support</u>		
Scintillation Room	100	*Individual study.
Radioactive Waste	80	*Individual study.
Storage	100	*Individual study.
Hazardous Storage	50	*Individual study.
Acid Storage 50	50	*Individual study.
Freezer Rm/Ultra Lo	60	*Individual study.
Refrigerated Storage	200	Refrigerated Storage
Glass Wash/Autoclave	200	*Individual study.
Equipment Storage	150	*Individual study.
<u>Staff Support Administration & Laboratory</u>		
Toilet, Staff	50	
Staff Lounge	100	Minimum; add 10 NSF per staff member greater than 10. 200 NSF maximum.
Janitor's Closet	40	

Surgical Area

Main Operating Room	400	Amount depends on number of protocols. More than one requires individual study. Increase in size requires justification.
Minor Operating Room	200	Amount depends on number of protocols. More than one requires individual study. Increase in size requires justification.
Scrub Alcove	60	Per operating room.
Case Prep Room	150	
Portable XRay Alcove	40	
Recovery Room	100	Individual study.
Central Material Assembly/Processing	150	Individual study.
Decontam/Cleanup	100	
Disposable/Sterile Storage	150	
Small steam sterilizer	60	Per machine. If double door, add 30 NSF.
Medium steam sterilizer	110	Per machine. If double door, add 60 NSF.
Large steam sterilizer	130	Per machine. If double door, add 60 NSF.
Small gas sterilizer/	120	Room includes sterilizer & aerator backup aerator.
Medium gas sterilizer/	200	Add 60, 75, or 100 NSF for aerator each additional small, medium, and large sterilizer/aerator respectively. If double door, add 30, 60, or 90 NSF respectively.
Large gas sterilizer/ aerator	250	
Vet Supply/Pharmacy	100	
Equipment Storage	100	Individual study.

Staff Support Surgical Area

Toilet, Female	50	1LAV, 1WC for each 15 women or fraction thereof.
Toilet, Male	60	1LAV, 1WC for each 20 men or fraction thereof.
Janitor's Closet	40	
Shower	30	1 per 20 lockers. Provide one shower for each group of male & female lockers.

Locker Rooms:

Male	100	Add 10 NSF per male staff greater than 10.
Female	100	Add 10 NSF per female staff greater than 10.

Vivarium

Loading Dock	110	
Animal Receiving	150	
Quarantine Room	250	
Isolation Room	100	
Exam/Treatment Room	150	
Animal Tub Room	80	
Radiography Rad/Fluoro Room	300	Individual study.
Film Processing	120	
View/Film Holding	100	

Xray Control Room	100	
Large Animal Room	175	Number of rooms must be justified according to projected protocols. Individual study.
Small Animal Room	150	Number of rooms must be justified according to projected protocols. Individual study.
Animal Runs (small)	175	Justification required. Individual study.
Animal Runs (Large)	400	Individual study.
Dry Bedding Storage	200	Individual study.
Feed Storage	200	Individual study.
Autoclave	60	Minimum. Individual study.
Equipment/Supply Storage	150	Individual study.
Clean Cage Preparation/ Maintenance	100	
Food Prep/Refrigeration	200	
Cage Storage	600	Individual study.
Cage Washing Dirty	200	
Cage Clean	200	
Cold Room Waste	100	Individual study.
Necropsy	180	
Carcass Refrig Storage	100	
Laundry	100	Individual study.
Clean Linen Storage	50	Individual study.
Dirty Linen Storage	50	Individual study.
Janitor's Closet	40	
<u>Staff Support Vivarium</u>		
Toilet, Female	60	1LAV, 1WC for each 15 women or fraction thereof.
Toilet, Male	60	1LAV, 1WC for each 20 men or fraction thereof.
Shower	30	1 per 20 lockers. Provide one shower for each group of male & female lockers.
Locker Rooms		
Male	100	Minimum. Add 10 NSF per male staff greater than 10.
Female	100	Minimum. Add 10 NSF per female staff greater than 10.
Lounge	100	